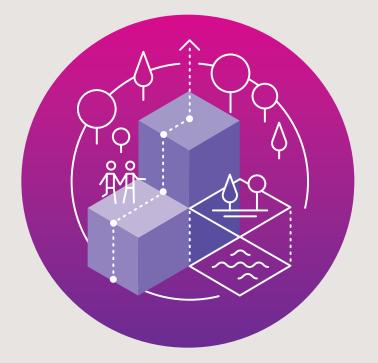
OUTCOMES FOR MACAULAY A DISCUSSION PAPER TO INFORM A REFRESHED STRUCTURE PLAN NOVEMBER 2019



E.



A CITY PLANNING For growth

Melbourne will be a leader in planning for growth and technological advancement. We will guide and influence the future development of the city for the benefit of all city users and in a way that values and celebrates its historical and cultural identity.

Acknowledgement of Traditional Owners

The City of Melbourne respectfully acknowledges the Traditional Owners of the land, the Boon Wurrung and Woiwurrung (Wurundjeri) people of the Kulin Nation and pays respect to their Elders, past and present.

CONTENTS

Glossary of terms	5
Introduction	6
Where is Macaulay	8
About Macaulay	10
The need for an updated structure plan	12
Refreshing the structure plan	14
Theme 1. Activities and land use: zoning	16
Theme 1. Activities and land use: affordable housing	18
Theme 2. Urban structure and built form	20
Theme 3. Transport and access	28
Theme 4. Public realm	32
Theme 5. Community infrastructure	36
Theme 6. Flooding	38
Next steps	42
Appendix	44

November 2019

Cover Image: Aerial view of Macaulay

Disclaimer

This report is provided for information and it does not purport to be complete. While care has been taken to ensure the content in the report is accurate, we cannot guarantee it is without flaw of any kind. There may be errors and omissions or it may not be wholly appropriate for your particular purposes. In addition, the publication is a snapshot in time based on historic information which is liable to change. The City of Melbourne accepts no responsibility and disclaims all liability for any error, loss or other consequence which may arise from you relying on any information contained in this report.

To find out how you can participate in the decision-making process for City of Melbourne's current and future initiatives, visit **melbourne.vic.gov.au/participate**



GLOSSARY OF TERMS

Built form: refers to the function, shape and configuration of buildings and their relationship to streets and open spaces.

Cloudburst: an extreme amount of precipitation in a short period of time.

Cloudburst street: used to channel and direct the large amounts of water that can be dumped during a cloudburst. By using a v-shaped profile and raised kerbs, water will flow to the middle of the street and away from buildings.

Commercial 1 Zone: to create mixed use commercial centres for retail, office, business, entertainment and community uses and provide for residential uses.

Commercial 2 Zone: encourages offices, appropriate manufacturing and industries, bulky goods retailing, other retail uses, and associated business and commercial services.

Community benefit: while there is no explicit definition of community benefit in the relevant legislation or planning policy context in Victoria, it typically refers to items such as open space, roads and drainage, affordable housing, community infrastructure and strategic land uses.

Community infrastructure: refers to public places and spaces that accommodate community facilities and services and support individuals, families and groups to meet their social needs, maximise their potential and enhance community wellbeing.

Development application: a formal application for development of a site. The application is usually made to local council and consists of an application form, supporting reports and plans of the proposed building or works.

Green street: a street that provides public thoroughfare whilst integrating garden beds, tree planting and water sensitive urban design (WSUD). Green streets would provide upstream connections to all cloudburst streets.

Floor Area Ratio: the ratio between the allowable total floor area developed on a site to the site area. A Floor Area Ratio of 3:1 would permit 3,000 square metres of floor area to be developed on a 1,000 square metre site.

Land use zones: the planning scheme zones land for different uses and sets out each zones purpose and set of requirements.

Mixed use zone: provides for a range of residential, commercial, industrial and other uses.

Open space: the publicly-owned land that is set aside primarily for recreation, nature conservation, passive outdoor enjoyment and public gatherings. This includes public parks, gardens, reserves, waterways, forecourts and squares. **Overlay:** the planning scheme maps zoning and overlays of land. Not all land has an overlay on it and only applies if there is a special feature of the land. For example a heritage building or a flood risk.

Permeability: describes the extent to which the urban form permits or restricts the movement of people of vehicles in different directions.

Planning controls: include zones, overlays, and particular provisions that are contained within the planning scheme.

Planning scheme: the Victorian Government and local councils develop the planning scheme to set out rules about the use and development of land.

Planning scheme amendment: changes to the planning scheme are called amendments.

Planning scheme amendment C190: implements the Arden-Macaulay Structure Plan's Stage 1 land use and development recommendations by making changes to the planning scheme.

Planning panel: appointed by the Minister for Planning to hear submissions made about a planning scheme amendment and make recommendations or provide advice about whether the amendment should proceed or not.

Public housing: is a form of long-term rental social housing for people on low incomes that are most in need. Public housing is owned and managed by the Victorian Government.

Public realm: external urban spaces that are publicly accessible and belong to everyone. This includes streets, squares, parks, green spaces and other outdoor spaces.

Social housing: is short and long-term rental housing that is owned and run by the Victorian Government or not-forprofit agencies.

Structure plan: is a document with a shared vision for an area and identifies the type and scope of change projected within an area over time.

Urban heat island effect: is common worldwide as cities become warmer than nearby suburban and regional areas, particularly at night.

Urban renewal areas: are areas to be redeveloped from industrial or low-intensity land uses to mixed-use precincts. Urban renewal areas in the municipality include Fishermans Bend, Arden and Macaulay.

Image 1: The former Victorian Producers' Co-Operative Company store on Sutton Street. A heritage listed four storey brick warehouse built in the early 1950's.

INTRODUCTION



This discussion paper has been developed to help engage with the community and other stakeholders on the future of Macaulay.

The City of Melbourne adopted the *Arden-Macaulay Structure Plan* in 2012 to guide future growth and development in parts of Kensington and North Melbourne. It outlines the preferred land use, building design, open space, transport and infrastructure outcomes to deliver a thriving and liveable place. The structure plan was developed in consultation with the community including businesses and major institutions.

Since adopting the structure plan there have been changes to the planning context affecting the area. This includes the Victorian Government's planning for Arden and a request from the Minister for Planning to review the built form controls for Macaulay in light of improved planning mechanisms.

In response to these changes the City of Melbourne is developing a refreshed structure plan for Macaulay that will:

- Maintain the approach to future growth and development from the 2012 structure plan.
- Outline how we will plan for the changes that have occurred since 2012.

This paper fully supports urban renewal that delivers a mid-rise, mixed use neighbourhood.

Council has not endorsed this discussion paper and its content. It has been prepared for engagement purposes only. Feedback will be used to further inform the development of the refreshed structure plan.

Have your say

This discussion paper contains a range of questions on the future of Macaulay. Tell us what you think by visiting:

participate.melbourne.vic.gov.au/macualay-refresh

What is a structure plan

The key aims of structure planning are to plan for and develop a shared vision for an area and to identify the type and scope of change projected within an area over time.

A structure plan helps give effect to state and local planning policy and is a tool to help influence, facilitate and manage change.

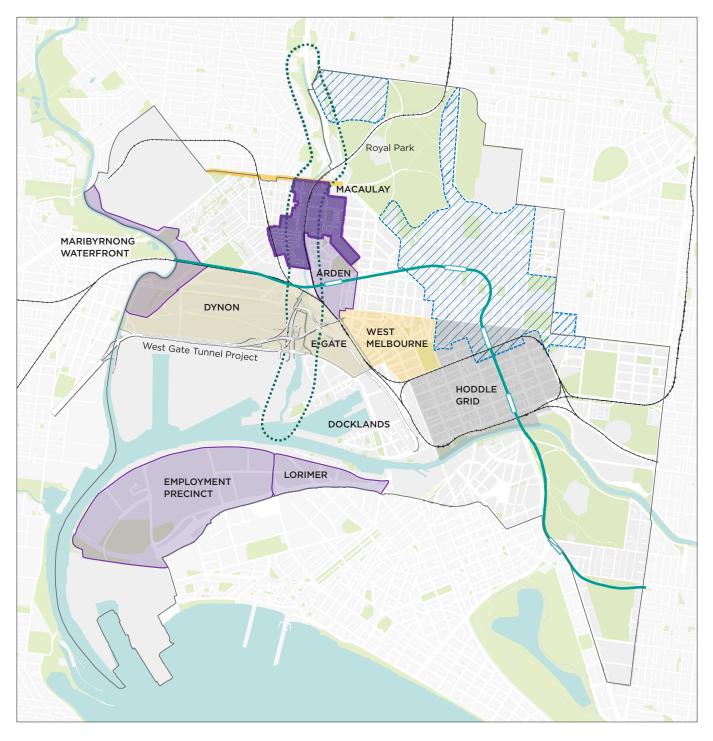
The refreshed structure plan will help ensure that Macaulay continues to grow as a sustainable, diverse and liveable neighbourhood.

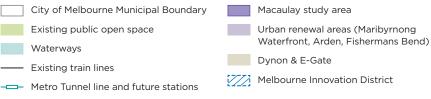
There are five key objectives of the refreshed structure plan:

- 1. To reinforce and consolidate the vision and framework for the long-term future growth, development and character of Macaulay.
- To give clarity and certainty about the level and type of development in terms of built form and land use that can occur in the area.
- To ensure that community infrastructure, open space and transport provisions meet the needs of a growing population.
- To help deliver current City of Melbourne strategies and policies related to Macaulay.
- To identify a set of actions to deliver the vision and framework for the future development of Macaulay, including planning scheme amendments and potential capital works proposals.

Figure 1: Timeline showing the progress of urban planning work in Arden and Macaulay since the Arden-Macaulay Structure Plan in 2012. Separate planning processes are now underway for both Arden and Macaulay.

WHERE IS MACAULAY





Map 1: Urban renewal areas and major projects in the City of Melbourne.

- West Melbourne Structure Plan
- Moonee Ponds Strategic Opportunities Plan
- Hoddle Grid and surrounds
- Racecourse Road Strategic Improvements Plan

The Macaulay urban renewal precinct covers approximately 90 hectares of land to the northwest of the Central City and incorporates parts of Kensington and North Melbourne.

Before European settlement in 1835, Moonee Ponds Creek was an integral part of the 'temperate Kakadu' that was Melbourne.

The Creek – which was a chain of ponds during drier months and a flood plain during heavy rains – was a travel route and water and food source for the Aboriginal peoples of the Kulin nation. It also fed into a picturesque saltwater lake near to what is now Southern Cross Station.

Food sources included the tuber daisy yam - of which Moonee Ponds Creek was a noted source - and bull-rush roots which were collected from the waterway and roasted; and eels, which were a seasonal food caught in stone weirs and long fibre nets.

In the decades after 1835, everything changed.

The Creek's cultural importance to local Aboriginal people was ignored. For much of the next 150 years, the creek and surrounding land that are now within Macaulay served as an industrial and warehousing hub around Melbourne's port and railway facilities alongside low-rise streets of workers cottages. This stage of development helped establish Macaulay's role as a mixed use neighbourhood. Future growth and development will continue to support residents and workers with Victorian Government projections indicating that Macaulay will become home to 10,000 residents and 9,500 jobs by 2051 (Minister for Planning, 2017).

The precinct is immediately adjacent to the Arden Urban Renewal Precinct and within close proximity to Dynon, E-Gate and West Melbourne. Several major projects such as Metro Tunnel are also occurring in the North Melbourne and Kensington area. These are described in Appendix I.



Urban renewal areas: places for growth and change

A significant amount of future growth and change will be accommodated in the municipality's urban renewal areas. These places are located in lowlying, flood prone areas that are transitioning from industrial and manufacturing uses to mixed-use inner city neighbourhoods. The map to the left shows the location of urban renewal areas in the City of Melbourne.

Each urban renewal area has, or will have, its own vision, role and character that will contribute to a highly liveable and prosperous city. They will accommodate different levels of growth and change with corresponding built form and public realm outcomes influenced by existing character, assets and transport connectivity. Macaulay will transition to a mid-rise, mixed use neighbourhood in comparison to places like Arden which will accommodate higher levels of growth supported by the new Metro Station.

Image 2: Aerial view over Arden and Macaulay.

ABOUT MACAULAY



Image 3: Aerial view of Macaulay showing the study area with the Arden Urban Renewal Precinct to the south.

Character

Macaulay has evolved as a mixed-use area, supporting a diverse community of residents and businesses. Workers cottages, brick factories and industrial units are found side by side, reflecting the mixed history of the area.

Buildings are predominantly low rise, with the exception of the public housing towers near Boundary Road. Lot sizes vary, with pockets of residential lots of under 500 square metres, to larger industrial land holdings of more than 10,000 square metres. Some heritage buildings have been repurposed for residential and business uses. The retention and adaptation of heritage buildings contributes to the character of the area.

Streets are generally wide and have been planted with native and exotic trees. On-street parking is provided throughout the precinct. The poor quality public realm and limited open space reflects the industrial past of Macaulay.

The land in Macaulay slopes gently towards the Moonee Ponds Creek, Upfield Rail Line and City Link Tollway which dissect the precinct and create a barrier to east west movement. The raised infrastructure of the City Link Tollway is a dominating presence while the Moonee Ponds Creek is channelised and often hidden from view.

As the economy transitions to jobs focused on knowledge, retail and services, there will be continued pressure to redevelop sites for higher value uses including residential developments and employment space that supports future jobs.

Economic role

Macaulay currently accommodates a diverse mix of commercial, retail and industrial uses such as manufacturing, wholesale trade and warehousing, typically accommodated in larger floor plate buildings. Located adjacent to Arden and in close proximity to the Parkville National Employment and Innovation Cluster, the employment profile of the area is changing.

Macaulay will play a complementary and supporting role to Arden, Parkville and the central city. Arden is strategically placed to be a high density innovation precinct with a focus on technology, life sciences, and health and education sectors. Macaulay will evolve as a mid-rise, mixed use neighbourhood where economic activity will transition to more knowledge-intensive, retail and service-based employment. "Unlike other renewal areas in Melbourne, this part of Arden-Macaulay is not an extension of the CBD. The area has a future as a mid-rise precinct that is part of the broader North Melbourne and Kensington areas."

- Planning Scheme Amendment C190 Panel Report

















Image 4: A selection of images showing some of the diverse buildings, streets and places of Macaulay.

THE NEED FOR AN UPDATED STRUCTURE PLAN

Since adoption of the *Arden-Macaulay Structure Plan* in 2012 there have been a number of changes to the planning context affecting the Macaulay area.



1. Opportunity to review and improve built form controls

The Minister for Planning approved Planning Scheme Amendment C190 which introduced interim built form controls for the Macaulay area.

The Minister requested that the City of Melbourne review the controls and identified a number of improvements which could be made. These include better management of density through the development of a Floor Area Ratio control (see Appendix III for more detail).

The interim controls were recently extended by the Minister until 30 September 2021.



4. Revised population forecasts

The 2012 structure plan forecast 20,500 residents and 22,500 jobs by 2040+ for both Arden and Macaulay. The Victorian Government has subsequently revised forecasts for the area as part of the Metro Tunnel business case as below. Initial testing reveals that these forecasts can be accommodated in mid-rise development.

POPULATION (2051)	ARDEN	MACAULAY	TOTAL
Residents	15,000	10,000	25,000
Workers	34,000	9,500	43,500
TOTAL	49,000	19,500	68,500



2. Separate planning processes for Arden and Macaulay

The 2012 structure plan was prepared by the City of Melbourne. The plan identified different roles for Arden and Macaulay with higher density development in Arden supported by Metro Tunnel. Further strategic planning work is now underway through separate processes.

The Victorian Planning Authority and the City of Melbourne are leading the planning for the Arden Urban Renewal Precinct.

The City of Melbourne will undertake the planning for the Macaulay Urban Renewal Area.



3. Metro Tunnel is under construction

The 2012 structure plan was developed with the assumption that Metro Tunnel would be built.

Construction commenced in 2016 and the Victorian Government committed \$2.9 billion to progress works in the 2016-17 State Budget.

The Metro Tunnel is due to open in 2025. While the project will deliver a direct benefit for Arden, it will also improve public transport options in Macaulay.



5. New approaches to flood mitigation

Flooding and water management are significant issues for Macaulay. The precinct is located in low-lying, flood prone land and is bisected by the Moonee Ponds Creek.

It is expected that sea level rise and more extreme rainfall events will exacerbate flooding and water management issues in the area.

Growth and development in the area offers an opportunity to celebrate water so that it is part of the future character of Macaulay.

This will be achieved by developing an integrated approach to water management in the public realm and private developments.



6. Development contributions

Ministerial Amendment C295 introduced an interim Development Contributions Plan Overlay (DCPO) for Macaulay.

Under the DCPO, a developer is required to make a monetary contribution to help fund new and upgraded infrastructure.

The interim DCPO will expire in 2020. A detailed contributions plan identifying infrastructure requirements for the increased population of the area is being prepared which will then be introduced into the Planning Scheme.

REFRESHING THE STRUCTURE PLAN

Towards a simplified vision for Macaulay

The *Arden-Macaulay Structure Plan* contained a vision for each theme in the structure plan:

- 1. Activities and land use
- 2. Urban structure and built form
- 3. Transport and access
- 4. Public realm
- 5. Community infrastructure
- 6. Sustainable infrastructure

The full vision statements are provided in Appendix II.

We are proposing to consolidate and simplify the six theme based visions from the 2012 structure plan into a single vision for Macaulay. This will also enable the removal of specific references to Arden which is now subject to a separate planning process.

Proposed Vision

Macaulay will transition into a mixed use, midrise neighbourhood with a distinct inner urban character. New development will be high quality and deliver amenity for residents, workers and visitors.

Improvements to public transport services, walking and cycling will be prioritised to support sustainable modes of travel.

Greening of streets, enhancing the Moonee Ponds Creek and the delivery of new open spaces will provide connections and a network of local places.

Public and private investment will deliver community infrastructure to meet the needs of a growing and diverse neighbourhood.

Macaulay will adopt innovative solutions to climate change adaptation and mitigation.

Have your say

Do you support the consolidated vision for Macaulay?

What are we refreshing in the structure plan

We are reviewing all six themes from the 2012 structure plan. The extent of the review will vary depending on how changes to the planning context impact each theme. Sustainable infrastructure is no longer a stand-alone theme. Environmental sustainability is embedded within all themes. Flooding and water management is now included as a separate theme. This reflects the increasing recognition that flooding is a key issue for the area. The table opposite provides an overview of our approach to each theme.

ТНЕМЕ	CURRENT STATUS	RESPONSE	PAGE
1. Activities and land use	Planning Scheme Amendment C190 introduced the Mixed Use Zone, Commercial 1 Zone and Commercial 2 Zone in Macaulay. The majority of new development is residential.	Macaulay has a history of providing housing and jobs. The future vision for the area supports a mix of uses. We will review the current land use zones and, If required, investigate the use of alternative zones that will deliver a mixed use neighbourhood.	16
	The 2012 structure plan identified that Arden-Macaulay should be contributing towards the provision of affordable housing, however there are limited mechanisms in the planning scheme to deliver affordable housing.	Assess the current target for affordable housing in Macaulay and include mechanisms in the refreshed structure plan to deliver affordable housing.	18
2. Urban Structure and built form	The Minister for Planning formed the view that the built form controls could be improved.	In line with recommendations from the Minister for Planning and consistent with best practice:	20
	Interim built form controls have been extended to 30 September 2021.	 Introduce a Floor Area Ratio control Consider introducing a Floor Area Uplift and define appropriate community benefits in exchange for additional development 	
		Update the built form policy	
3. Transport and access	Metro Tunnel is under construction and due to open in 2025. The City of Melbourne's <i>Transport</i> <i>Strategy 2030</i> guides the future of transport in the city, outlining our vision and policy direction for the next 10 years.	Objectives and strategies in the 2012 - structure plan generally remain relevant —	28
4. Public realm	There has been limited change to the public realm. Current planning mechanisms are unlikely to deliver the scale of public open space sought by the 2012 structure plan.		32
5. Community infrastructure	The majority of community infrastructure remains located around Melrose Street and Buncle Street in North Melbourne.	-	36
Sustainable infrastructure	Best practice approaches to sustainable infrastructure have changed since the 2012 structure plan. Some proposals are also challenging to deliver in Macaulay where land is largely under private ownership.	The refreshed structure plan will embed environmental sustainability across all themes. Objectives and strategies in the 2012 structure plan will be refreshed in- line with best practice, current policy and forecast growth.	All themes
6. Flooding	Flooding is recognised as one of the major issues affecting Macaulay now and in the future.	An integrated approach to water management is required to mitigate flooding. This provides an opportunity to celebrate water in the landscape.	38

THEME 1. ACTIVITIES AND LAND USE: ZONING

What did the 2012 structure plan outline

The plan noted that land uses within Arden and Macaulay generally represent an underutilisation of the area considering its proximity to the central city and to existing and future transport infrastructure. It recommended that the majority of land north of Macaulay Road transition to a Mixed Use Zone to facilitate change.

What has changed

At the time of the 2012 structure plan, significant areas of Macaulay were subject to the Industrial 1 Zone and Industrial 3 Zone. This supported the industrial, warehousing and manufacturing businesses that developed from the early twentieth century.

The current land use controls were introduced through Planning Scheme Amendment C190 which implemented the land use recommendations in the Arden-Macaulay Structure Plan. As shown in Map 2, the majority of the Macaulay area is in the Mixed Use Zone. There are strips of Commercial 1 Zone along Macaulay Road and Racecourse Road. In the southern part of Kensington a number of properties are in the General Residential Zone while a pocket of Commercial 2 Zone supports a range of business uses.

What is the situation today

As shown in Map 3, from 2014 to June 2019 there have been fourteen development applications in Macaulay. The majority of sites subject to development activity are located within the Mixed Use Zone (MUZ), with the exception of one development within the Commercial 1 Zone (C1Z) and one in the Commercial 2 Zone (C2Z).

The Industrial 1 Zone land between Stubbs Street and the Moonee Ponds Creek is not conducive to increasing public open space.

Current development activity within the Mixed Use Zone has been predominantly residential and has not delivered a genuine mix of uses. If this trend was to continue it would undermine the historic role of the area and future vision for a mixed use precinct that supports the transition to more knowledge-intensive, retail and service-based employment.



Legend

Road Zone (RDZ1)
Public Use Zone 4 - Transport (PUZ4)
Public Use Zone 1 (PUZ1)
General Residential Zone 1/2 (GRZ1/2)
Mixed Use Zone (MUZ)
Public Park and Recreation Zone (PPRZ)
Industrial 1 Zone (IN1Z)
Industrial 3 Zone (IN3Z)
Commercial 1 Zone (C1Z)
Commercial 2 Zone (C2Z)
Amendment C190 boundary

Map 2: Land use zones in the Macaulay area

How are we proposing to respond

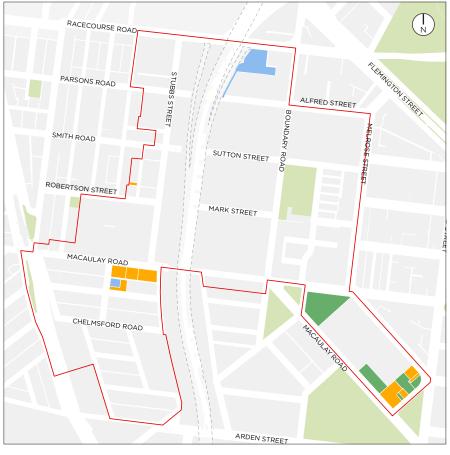
There is a need to ensure that land use zones support the future vision for Macaulay by delivering a true mixed use neighbourhood.

A mix of different uses helps make a place more interesting and lively at different times of day and days of the week. Having a range of shops, services and jobs available within a short distance of homes encourages more sustainable transport choices and improves people's quality of life. *Plan Melbourne 2017-50* supports creating mixed-use neighbourhoods at varying densities (Policy 5.1.1) and 20-minute neighbourhoods that support living locally (Principle 5).

The City of Melbourne will continue to work with the Victorian Government in reviewing the current land use zones. If required we will investigate the use of alternative zones that deliver the preferred mix of residential dwellings and employment floor space.

Have your say

The majority of recent developments in Macaulay are almost entirely residential. How important is it to you that there is a mix of homes and local employment opportunities in a neighbourhood?



Legend



Map 3: Development activity in Macaulay from 2014 to June 2019

THEME 1. ACTIVITIES AND LAND USE: AFFORDABLE HOUSING

What is affordable housing

Affordable housing refers to a spectrum of housing targeted at meeting the needs of very low to moderateincome households. This includes public housing managed by the Victorian Government, community housing managed by registered housing providers, crisis accommodation and transitional housing.

What did the 2012 structure plan outline

The structure plan identified the need for a greater supply of affordable, accessible and diverse housing. It acknowledged that Arden and Macaulay should be contributing towards the provision of affordable housing. Strategies in the plan are centred on the further investigation of appropriate mechanisms to deliver affordable housing.

What has changed

There is a clear and significant need for affordable housing in the municipality, established in the Victorian Government's *Homes for Victorians* strategy and our *Homes for People Housing Strategy 2014-18*.

There has been increased recognition that current approaches to providing affordable housing are unable to meet existing and future demand. The Victorian Government and local governments have acknowledged the need to work with the not-for-profit and private sectors to adapt the way we deliver affordable housing.

Improvements to the interim built form controls

In September 2017 the Minister for Planning approved interim built form controls for Macaulay and identified a number of improvements which could be made including the provision of affordable housing, in line with the policy within the Arden-Macaulay Structure Plan 2012 and the Homes for Victorians strategy. Appendix III provides further detail on the Minister's letter.

"Affordable housing is housing, including social housing, that is appropriate for the housing needs of very low, low, and moderate-income households."

- Planning and Environment Act 1987

What is the situation today

A large area of public housing comprising apartment towers built in the 1960s and townhouses built in the 1990s is located between Alfred Street, Melrose Street, Canning Street and Boundary Road in North Melbourne.

A recently completed apartment building in North Melbourne includes 34 apartments, with 28 of these sold at a discounted rate to former public housing tenants previously living within 4km of the site.

A development with planning approval in Kensington for 146 dwellings will provide 10 per cent of the dwellings to key workers with a 20 per cent discount applied to their rent. This formed part of the demonstrable benefits to justify exceeding the preferred maximum building height.

West Melbourne Structure Plan

The structure plan includes an action that applicants should provide a minimum of 6 per cent affordable housing in three precincts; Flagstaff, Spencer and Station. If the Victorian Government affordable housing policies are updated, the target will be increased.

The plan also states that affordable housing should be provided in perpetuity with the assets transferred at no cost to a Registered Affordable Housing Association.

How are we proposing to respond

Urban renewal areas such as Macaulay provide an opportunity to take a proactive role in providing accessible, affordable and diverse homes. This would make the level of amenity and access to services available to a greater diversity of people than the market currently serves.

In preparing a refreshed structure plan for Macaulay we will:

- assess the current target for affordable housing in Macaulay, and if necessary, adjust accordingly
- include mechanisms in the refreshed structure plan to deliver affordable housing.

Have your say

How important is it that new residential developments contribute to increasing the amount of affordable housing?



Case study: Delivering inner city affordable housing

A mix of private and affordable housing is provided in this 59 unit development in Gipps Street, Abbotsford on the site of a former boot factory.

Using a co-operative housing model, not-for-profit developer Common Equity Housing Limited invested profits from the sale of the project's 34 private dwellings to ensure its 25 social housing dwellings are affordable to low-income tenants. Providing apartments and townhouses across two buildings with a central courtyard, the developments sustainability initiatives include high levels of natural ventilation, daylight and insulation.

205 Gipps Street won the Victoria Affordable Development award in 2014 by the Urban Development Institute of Australia and provides a model for similar scale and mixed tenure housing in Macaulay.

Image 5: 205 Gipps Street, Abbotsford. Photographer: Emma Cross

THEME 2. URBAN STRUCTURE AND BUILT FORM

What did the 2012 structure plan outline

The plan identified that existing population densities are too low to meet the objective of accommodating population growth. As a former industrial area, there are a number of issues to consider in delivering urban renewal, including:

- increasing the walkability of neighbourhoods
- existing streetscapes are not places for people
- motorway and industrial noise
- new buildings must be well designed
- respect the existing low-scale, heritage context.

The plan introduced a series of strategies to deliver high quality urban design, including:

- improving walkability by introducing a finer grain network of streets and laneways
- integrating new developments with the character and scale of adjacent suburbs
- ensuring new developments contribute positively to the public realm
- ensuring buildings are designed to be flexible in use and achieve best practice sustainable design

What has changed

Planning Scheme Amendment C190

Planning Scheme Amendment C190 was gazetted in October 2017. The Amendment made changes to the Melbourne Planning Scheme by implementing land use and development controls for Macaulay as recommended within the Arden-Macaulay Structure Plan.

Interim built form controls were introduced through Design and Development Overlay 63. The Minister for Planning recently extended the controls until 30 September 2021.

Design and Development Overlay (DDO) 63

DDO63 sets out a range of requirements for future built form in the Macaulay area including:

- building heights
- street wall height and setbacks
- active street frontages
- weather protection and facade treatment.

A key design objective is to create a compact, high density, predominantly **mid-rise**, **6 – 12 storey walkable neighbourhood** that steps down at the interface with the surrounding low-scale established residential neighbourhoods. DDO63 comprises eight areas with different preferred and absolute maximum heights. Any development that exceeds the preferred maximum height must provide a demonstrable benefit to the broader community that include among others:

- exceptional quality of design
- a positive contribution to the quality of the public realm
- high quality pedestrian links where needed
- good solar access to the public realm.

DDO63 have been extended to 30 September 2021. This will allow development applications to be submitted and assessed under the current controls while the refreshed structure plan and new controls are prepared.

Review of built form controls

In approving the amendment, the Minister for Planning identified a number of improvements which could be made to the controls. The recommendations included:

- better management of density through development of a floor area ratio control
- better expression of side, rear and upper level setbacks and greater guidance for the City Link, railway line and Moonee Ponds Creek interface

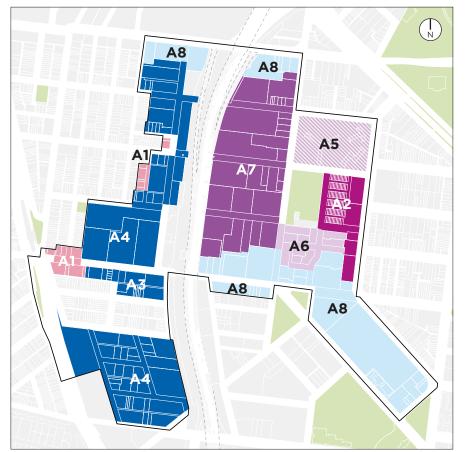
Appendix III provides further detail on the Minister's letter.

What is the situation today

The current controls are based on building heights and setbacks rather than setting a specific amount of development that can occur on a site. Under these controls, the resulting density of many developments has been high and if this trend continued the cumulative effect could lead to:

- reduced amenity in buildings and the public realm including lack of daylight, sunlight, outlook and increased overshadowing
- a future population that could be greater than current population forecasts
- additional pressure on existing and future infrastructure, including open space and community faculties, that is being planned based on current population forecasts.

By not setting a specific amount of development, the current planning controls contribute to these issues. Updating the controls provides an opportunity to consider other mechanisms that better manage density and provide greater certainty regarding development outcomes.



Legend

Macaulay boundary	
Preferred max height	Absolute max height
3 storeys	4 storeys
4 storeys	6 storeys
6 storeys	8 storeys
8 storeys	N/A
6 storeys	8 storeys
9 storeys	12 storeys
9 storeys	12 storeys
	Preferred max height 3 storeys 4 storeys 6 storeys 8 storeys 6 storeys 9 storeys

Map 4: Preferred maximum and absolute maximum building heights in DDO63



Case study: Mid-rise development in Macaulay

393 Macaulay Rd includes a mixture of studio, one, two and three-bedroom apartments. A landscaped, open-air walkway will bring cross-flow ventilation and natural light to the apartments. Communal spaces on the upper and ground floors will provide opportunities for residents to connect. The design will retain and restore the facade of the original Art Deco heritage building.

Planning status: Approved Floor Area Ratio: 3.4:1 Storeys: 8 Dwellings: 73 Employment floor space: 380 sqm Architect: Fieldwork Developer: Make Ventures

Image 6: 393 Macaulay Road, Kensington. Image: Assemble

Delivering good growth

Good growth in Macaulay will be achieved by supporting appropriate levels of high quality development which complement the higher density renewal in Arden and the established residential areas of Kensington and North Melbourne.

This means greater recognition of Macaulay as a place in its own right, ensuring growth responds positively to Macaulay's valued characteristics including the areas diversity, heritage and mix of uses.

Macaulay will provide highly sustainable forms of development and a range of building types. It will be largely mid-rise, mixed use development, but with some lower buildings in the predominantly residential areas, and scope for some taller buildings on larger land holdings (see pages 26-27). It will ensure good levels of sunlight and daylight to streets and spaces, increased open space and human scale streets.

Existing buildings in the area, including heritage buildings, are often valued by the local community and contribute to the character of Macaulay. The adaptation of existing buildings can present opportunities to accommodate new uses and help maintain a diversity of activities in the area. Macaulay should help mitigate the impacts of climate change by reducing greenhouse gas emissions and taking adaptive measures to reduce the impacts of climate change on people and the environment.

Good growth in Macaulay should be of the highest design and environmental standards and be adaptable to change, providing a range of housing and employment opportunities over time. There are considerable opportunities for new development in Macaulay to respond to the challenges of climate change at a precinct-wide scale. This includes water sensitive urban design to help mitigate the impacts of flooding and utilising existing and new rooftops to generate zero-carbon energy through solar panels.

Good growth will provide greater certainty to the community and developers, while continuing to make the best use of inner city land to provide a balanced mix of different housing types and jobs. By taking an integrated approach to planning, urban renewal in Macaulay will provide the right infrastructure and services to support the future community.



Image 7: Redevelopment of the former GTV 9 site in Richmond includes a mix of town houses and apartment buildings with a high quality public realm and the adaptation and re-use of existing heritage buildings. Photographer: Peter Clarke

How are we proposing to respond

We will review the current controls and develop new built form controls that support high quality urban design outcomes for Macaulay.

Develop new density controls

A floor area ratio is a type of planning control that sets a specific amount of development that can occur on a site. When combined with other built from controls, it allows for variation in the height and shape of buildings to help ensure that new developments respond better to their site and the characteristics of the area.

Improve built form outcomes

Working alongside the Floor Area Ratio control, we will improve the built form controls by focusing on:

- how the controls can better respond to the characteristics of different areas in Macaulay
- the relationship between floor area ratios and building heights
- interfaces of buildings to the street, neighbouring buildings and open spaces including overshadowing
- improving the climate change adaptation and mitigation performance of new buildings.

Achieving the vision through new built form controls

A key design objective is to create a mid-rise, 6–12 storey walkable neighbourhood that steps down at the interface with the surrounding low-scale established residential neighbourhoods.

A floor area ratio of 3:1-4:1 could achieve this vision while ensuring that there is enough development to meet the projected forecast of 10,000 residents and 9,500 workers.

Pages 24-25 contain further information on floor area ratios and built form controls.

Testing the controls

When preparing new built form controls we start with a design led process to model a preferred built form outcome based on character, quality of streets, overshadowing and delivering a diversity of building types. We then test the capacity of the controls to ensure that population forecasts for residents and workers are able to be accommodated.

Sustainable buildings

While many existing buildings do not have heritage value, retaining and adaptively reusing a mix of building types will support a continuing mix of relevant land uses.

The practice of adapting existing buildings is an inherently sustainable process that reduces the embodied energy involved in construction and contributes to the social resilience of the neighbourhood though the retention of local character.

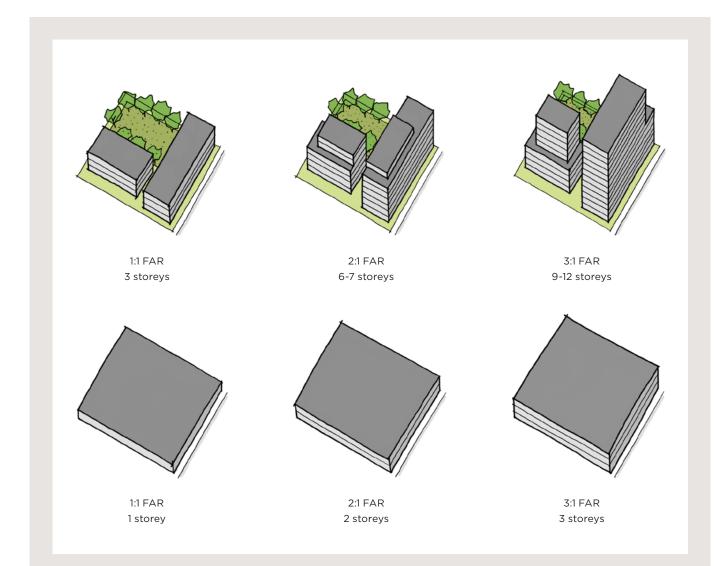
We will ensure new or existing buildings in Macaulay are designed or retrofitted to the highest sustainability standards by:

- encouraging the use of rooftop solar in appropriate areas
- identifying opportunities for new and existing buildings to increase greening, including green roofs and vertical greening
- exploring ways to incentivise increased canopy cover and support nature in the private realm through incentives such as the Urban Forest Fund
- encouraging developers to install rainwater tanks that provide on site retention to reduce flash flooding and stormwater impacts
- encouraging the design of buildings that enable conversion to other uses over time.

Have your say

Floor area ratio is a type of planning control that sets a specific amount of development that can occur on a site. It allows for variation in the height and shape of buildings to help ensure that new developments respond better to their site and the characteristics of the area.

How important is it that planning controls provide certainty in the amount of development for each site and allow variation in the height and shape of buildings?



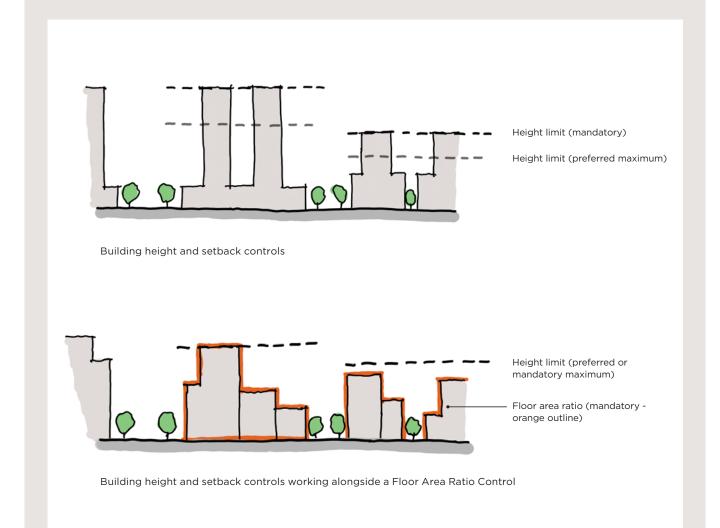
Understanding floor area ratios and built form controls

What is a floor area ratio control

A floor area ratio sets a specific level of development that can occur on a site. The floor area ratio is the ratio of a new building's total floor area in relation to the size of site it is being built on.

The diagrams above explain the concept of floor area ratios and how it can result in different building types. For example, a floor area ratio of 4:1 allows for a total floor area up to four times the size of the site itself. This could be up to four storeys if 100 per cent of the site is developed or eight storeys if only half the site is developed. Floor area ratios allow for a variety of building types in certain areas. When combined with built form controls, floor area ratio controls create a flexible framework in which multiple successful building forms can be achieved.

Figure 2: Indicative built form massing showing potential different built form outcomes for Floor Area Ratios of 1:1, 2:1 and 3:1. (Adapted from the Apartment Design Guide, NSW Department of Planning and Environment, 2015)



Built form controls

Working alongside floor area ratio controls, built form controls help ensure the overall character desired for an area can be achieved and ensure that the vision can be realised. It is important that built form controls are responsive to the local context and characteristics of the area while providing opportunities for innovation and great design on a site-by-site basis.

The top diagram represents the current built form controls. By only using height limits and setbacks to guide built form, there is less control over the density, or intensity, of a development. The bottom diagram represents the proposed controls. Floor area ratios help to control the density, or intensity, of the development in relation to the size of a site. The orange outline above highlights a potential allowed density of a site according to a floor area ratio control. When used in combination with built form controls such as building heights and setbacks, floor area ratios can enable a better response to the surrounding context and character of a site, allowing for a greater diversity of buildings while placing a natural cap on height.

Figure 3: Indicative built form massing showing potential different built form outcomes for Floor Area Ratios of 1:1, 2:1 and 3:1. (Adapted from the Apartment Design Guide, NSW Department of Planning and Environment, 2015)

LARGER LAND HOLDINGS

The redevelopment of larger land holdings in Macaulay will play a major role in supporting the future character of the area.

Historically, Macaulay has served as an industrial and warehousing hub around Melbourne's port and railway facilities. This resulted in a subdivision pattern of varying lot sizes including many larger land holdings.

These sites share a number of characteristics:

- frontage to the major streets in the area; Racecourse Road, Boundary Road and Macaulay Road
- close proximity to the Moonee Ponds Creek, Upfield rail corridor and Citylink
- impacted by 1 in 100 year flooding
- large blocks with limited connectivity and dead end streets that do not promote walking and cycling
- heritage buildings

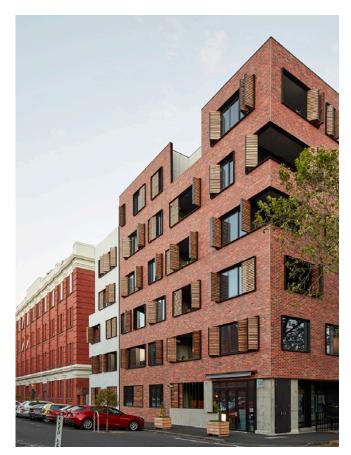


Image 8: Oxford and Peel, a 4-6 level apartment building in Collingwood. By designing a cluster of brick buildings, the bulk and scale of the development is reduced.

Outcomes

Utilise the flexibility of Floor Area Ratios on larger land holdings to:

- deliver a mid-rise, mixed use neighbourhood
- deliver new streets and open spaces
- retain and repurpose heritage buildings and adapt other buildings that contribute to the character of the area
- avoid overshadowing of existing and new open spaces
- provide appropriate transitions to existing residential neighbourhoods
- provide an appropriate interface to the Moonee Ponds Creek corridor
- provide a strategic approach to car parking and traffic management

Additional density, such as a Floor Area Ratio of 4:1, may be appropriate in these locations if blocks are carefully masterplanned.



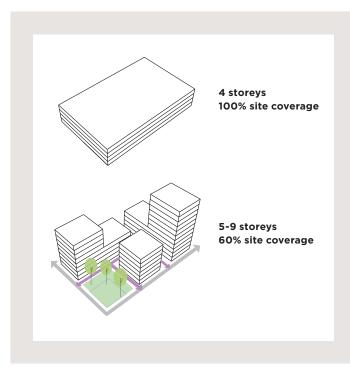
Image 9: Short Stop Cafe in Melbourne. High quality design and materials make a significant contribution to the public realm and street life.



Legend



Map 5: Plan showing larger land holdings in the Macaulay area.



Floor area ratio controls on larger sites

The diagrams to the left explain the concept of floor area ratios and how it can result in different building types. For example, a floor area ratio of 4:1 allows for a total floor area up to four times the size of the site itself. This could be up to four storeys if 100 per cent of the site is developed or eight storeys if only half the site is developed.

For larger sites, a floor area ratio combined with other built form controls allows for variation in the height and shape of buildings while also enabling the delivery of new streets and open spaces. This will help ensure that the future street network is better connected to support walking and cycling in the area.

Figure 4: An example of a floor area ratio of 4:1

THEME 3. TRANSPORT AND ACCESS

What did the 2012 structure plan outline

The plan emphasised the need for high quality public transport infrastructure to support the case for urban renewal in Arden and Macaulay, including better integration of train, tram and bus services.

Streets in Arden and Macaulay will be designed to prioritise pedestrians, cyclists, trams and buses to ensure residents, workers and visitors can move easily within and to the precinct.

Freight and traffic will be safely and efficiently managed in the area. Car sharing will be encouraged and car parking provision in new developments will be limited where justified.

What has changed

The Metro Tunnel is under construction and due to open in 2025. The new North Melbourne Station is located in Arden Central.

Community feedback on the Transport Strategy 2030 revealed overwhelming support for improvements to walking, cycling and public transport including reallocation of street space to support these modes along with measures to reduce car dependency.

What is the situation today

Macaulay benefits from close proximity to the Central City, Arden and Parkville, but better active and sustainable transport modes should be enabled.

Walking

Many areas of Macaulay are relatively disconnected and difficult to access. Industrial sites are generally large and have limited connections through the site. Likewise, limited crossing points across barriers such as the Moonee Ponds Creek and railway lines can also make for a long walk.

Cycling

Limited connections can make routes more circuitous than they need to be, therefore reducing the convenience and directness of cycling. Bike riders face safety challenges with cycling routes on roads where motor vehicles travel at high-speed. Bicycle lanes are generally painted with no separation or protection from vehicles.

Public Transport

Macaulay is relatively well-serviced by public transport, particularly to the east. Services typically run at a higher frequency relative to other parts of Melbourne and provide access in all directions. This includes north-south by tram and rail and east-west by tram and bus. Most areas of Macaulay are within a ten-minute walk of a train station. However, community feedback indicates that stations are perceived to have low amenity and safety. Some services suffer from crowding and poor frequencies which will be exacerbated without further investment and improvements.

Vehicle movement and access

Modelling indicates most roads in Macaulay are capable of accommodating demand under existing conditions, with a few pinch points where delays could be expected, for example at railway crossings and parts of Racecourse Road, Boundary Road, Macaulay Road and Arden Street. Delays are mainly due to traffic travelling through the area, rather than to, or from, Macaulay.

How are we proposing to respond

We will progress measures that improve the safety, comfort, attractiveness and convenience of walking, cycling or taking public transport.

Growth and development in Macaulay will require significant investment in upgrading the street network to support the changing role and function of streets. A number of street types that prioritise walking, cycling, public transport and flood mitigation are shown on pages 24-25.

Support increased use of active transport

The redesign and upgrade of streets should enhance the walking experience and provide dedicated cycle routes protected from vehicular traffic. Creating new streets on larger development sites will further enhance the street network and improve connectivity across Macaulay.

There is a need to enhance the Capital City Trail and improve crossings of major barriers including the Moonee Ponds Creek, Upfield and Craigieburn rail corridors. Additional links across the corridors should also be sought as part of any future level crossing removal project.

Improve public transport

The Victorian Government is responsible for most aspects of planning, building, managing and operating public transport in Melbourne through its various agencies and contractors.

The City of Melbourne will advocate to the Victorian Government for public transport improvements in Macaulay including:

- the design of stations to increase safety and accessibility
- a new tram service through Arden and Macaulay along Boundary Road
- increased frequency of services.



Image 10: Existing poor quality cycling infrastructure on Macaulay Road provides an opportunity to improve the safety, comfort and convenience of cycling.

Reduce use of private vehicles

Private cars are low occupancy vehicles that quickly fill up the limited space on the road network. As development increases, more locations across the street network become pinch points. To accommodate future growth the focus should be on reducing vehicle demand and providing reliability in travel for walking, cycling and public transport so that people who need to drive are able to do so.

Reduce on-street car parking

Reallocating on-street car parking space enables improved streetscapes including wider footpaths, new bike paths, dedicated public transport facilities and flood mitigation measures. Remaining car parking spaces should prioritise those that need to drive by improving accessible parking.

Reduce off-street car parking

Introduce maximum car parking rates

Introducing maximum rates provides greater flexibility in the amount of car parking that can be provided. By introducing maximum rates, the onus is placed on developers to demonstrate why they need to provide higher levels of car parking when there is good public transport, walking and cycling access nearby.

Unbundle car parking

Car parking is often titled and sold ('bundled') with a dwelling, particularly in the case of apartments. Unbundling car parking compels developers to sell or lease parking independently of residences or commercial leases. This is a more efficient use of parking resources as people are able to choose whether they need car parking or not.



Image 11: While most areas of Macaulay are within ten minutes' walk of a train station, community feedback indicates that stations are perceived to have poor safety and amenity.

Explore precinct-based parking

Traditionally, planning for off-street parking has been based on the anticipated parking demand on a site-by-site basis. Precinct parking shifts this approach towards considering the consolidated demand for parking across a precinct, reducing the number of unused parking spaces in new buildings.

Promote car share

Privately owned cars are typically used 5% of the time and remain parked 95% of the time. Car share provides a more efficient model where many people can share the use of a single vehicle. This can result in substantial space savings through reduced car parking. It also supports broader sustainable transport aspirations whilst still providing access to a car for those types of trip that need one.

Have your say

To better support sustainable travel, we need to increase the frequency of public transport and prioritise walking and cycling over private vehicles.

How important do you think our proposals for achieving sustainable travel are?

Streets that support improved transport and access

Neighbourhood Connector

Streets such as Macaulay Road and Boundary Road provide direct links from Macaulay to surrounding areas and beyond.

Existing 20 metres wide streets could be reconfigured into a single lane, two way street for vehicles including buses. Generous footpaths can accommodate amenities such as outdoor dining areas, bike parking, seating, and bus stops.

Designed with active transport users in mind, traffic speeds should be reduced and protected bike lanes integrated for cyclists.

Neighbourhood Street

Streets such as Melrose Street or Stubbs Street filter local traffic into the neighbourhood network. These are not considered through-routes.

Existing 30 m wide streets could be reconfigured by expanding central median strips into linear parks for passive recreation, water management, additional tree planting and improve biodiversity.

Local Street

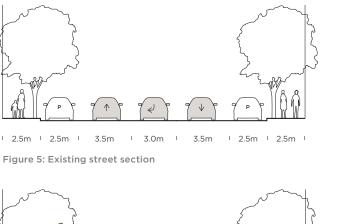
The local street network consists of redesigned 20 m streets and newly constructed 12 m streets on larger development sites. Both address local traffic needs and are focused on streets as places for people rather than vehicle movement. They also allow for water management, additional tree planting and improve biodiversity.



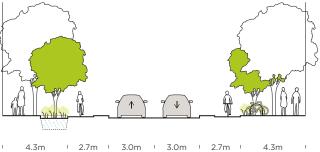
Legend

- Neighbourhood Connector
- Neighbourhood Street
- Local Street existing
- Local street proposed
 - Larger land holdings

Map 6: Proposed street hierarchy



Neighbourhood connector



2.7m 3.0m 3.0m 2.7m Figure 6: Potential street section

Local street

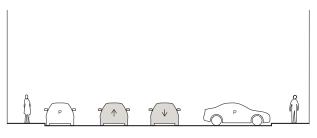




Figure 7: Existing street section

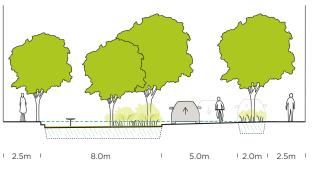


Figure 8: Potential street section

Neighbourhood street

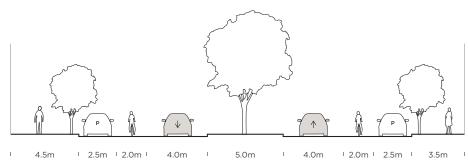


Figure 9: Existing street section for neighbourhood street



10.4m 2.5m 2.0m 2.3m 3.0m 3.0m 2.3m 2.0m 2.5m Figure 10: Potential street section for neighbourhood street

THEME 4. PUBLIC REALM

What did the 2012 structure plan outline

The legacy of industrial uses has resulted in a poor quality public realm, including:

- large blocks that discourage walking and streets fronted by the blank walls of warehouses and sheds
- the quantity and diversity of open space, particularly on the western side of the Moonee Ponds Creek
- the Moonee Ponds Creek is a neglected open space corridor
- major roads and infrastructure barriers limit access to open space
- inconsistent and unattractive streetscapes.

The plan identified how Macaulay's urban structure, built form, open spaces and transport network can improve the quality of the public realm, including:

- introducing five new local parks
- revitalising existing open spaces like the Moonee Ponds Creek
- the role of the future street network should not only prioritise pedestrian and cycling access, but strengthen the local ecosystem
- delivery of new streets and open space on large sites
- buildings contribute positively to the public realm to create safe and inviting spaces for the community.



Image 12: Looking towards Citylink along Mark Street, North Melbourne. Many existing streets in Macaulay require substantial investment to transform them into places for people. Streets will also play an increasing role in mitigating flood impacts.

What has changed

Update to the Public Open Space Contribution

A public open space contribution from developers is one of a number of potential resources for the acquisition of land for open space and improvement of existing facilities. The contribution is provided through one of the following:

- percentage of the land
- percentage of the site value
- a combination of both.

The contribution rate in Macaulay is 7.06 per cent. (Schedule 53.01 in the Melbourne Planning Scheme).

Moonee Ponds Creek Strategic Opportunities Plan

The creek corridor is largely controlled by Victorian Government agencies. In our role as an advocate, the plan sets out the opportunities that we believe should be taken to turn the creek into an exemplar corridor for water management, public space and community activity, active transport, biodiversity, heritage and culture.

Opportunistic public open space

The Eastwood and Rankins Road Reserve next to Kensington Station is located just outside the Macaulay study area. By expanding two small traffic islands and discontinuing part of Eastwood Street, the amount of green open space more than doubled (see Image 14). The current planning controls in Macaulay make it difficult to deliver this scale of open space on development sites.



Image 13: Playground at Boundary Road Reserve, North Melbourne

What is the situation today

The industrial history of Macaulay means there are few open spaces and many large land holdings. This makes for a poor walking environment with limited connectivity across the precinct.

Open space within Macaulay is limited to the Boundary Road Reserve and Moonee Ponds Creek corridor, however the precinct is in close proximity to a number of open spaces. These include Clayton Reserve, Gardiner Reserve, North Melbourne Recreational Reserve and Royal Park. There is a higher concentration of open space to the east of the rail corridor, with limited access to open space on the western side of Macaulay. Connections and access to open space is often poor due to the quality of the public realm and infrastructure barriers including the rail corridors.

How are we proposing to respond

Macaulay's streets and open spaces are great places for people, celebrate water in the landscape and help to restore local ecosystems.

A connected street network

The redesign and upgrade of streets should enhance the walking experience and provide dedicated cycle routes protected from vehicular traffic. Creating new streets on larger development sites will further enhance the street network and improve connectivity across the Macaulay area. Cloudburst and green streets clean and direct water back towards the Moonee Ponds creek and help reduce flooding (see page 41 for more detail on cloudburst and green streets).



Image 14: Eastwood and Rankins Road Reserve, Kensington. By expanding two small traffic islands and closing part of Eastwood Street the amount of green open space has more than doubled, providing much needed open space for the residents of Kensington.

Moonee Ponds Creek

The City of Melbourne is working in partnership with the Victorian Planning Authority, who is responsible for preparing an Implementation Plan for the creek corridor. The plan will identify project priorities, make recommendations for governance arrangements and accountabilities and facilitate the commencement of 'quickwin' projects.

New open spaces

Create a network of new open spaces across the precinct and ensure that they are accessible to the growing community. New open spaces will provide a range of benefits, including:

- passive and active recreation
- mental health, wellbeing and social connectedness
- water sensitive urban design with on-site water retention
- mitigation of the urban heat island effect
- connecting green streets and open spaces to create biodiversity corridors.

Delivering open space

Potential open spaces and public realm improvements can be delivered in a variety of ways, including:

- public open space contribution
- capital works program
- road closures
- acquisition of land
- utilising the flexibility of Floor Area Ratio controls (see page 24).

Have your say

What type of activities should our outdoor public spaces cater for?



Map 7: Existing and potential open space network

Legend

	Existing open space
	Potential new open space
*	Further investigation areas

Locations for open space

The locations for potential new open space have been identified by considering:

- recommendations in the Moonee Ponds Creek Strategic Opportunities Plan
- utilising sections of dead end streets on the eastern side of the Moonee Ponds Creek
- utilising the 7.06 per cent public open space contribution as a land contribution on larger sites

Improvements to the Moonee Ponds Creek corridor and Boundary Road Reserve provide opportunities to further enhance open space amenity in Macaulay.

A diverse network of open spaces



Small local open space

Located in easy safe walking distance of home and generally able to accommodate uses such as rest and relaxation, play, socialising, urban heat mitigation and contact with nature.

Example: Leveson Street Reserve, North Melbourne



Local open space

Located in easy safe walking distance of home and large enough to provide for at least two activities such as a playground and open grassed area with seats. These are generally more intimate spaces that are not intended for large groups.

Example: Buluk Park, Docklands



Neighbourhood open space

Located in walking distance of home with a diversity of character and facilities that appeal to the local community at a neighbourhood level. This means a family or groups of people can visit the park for an extended time, with a suitable range of facilities to meet their different needs.

Example: Gardiner Reserve, North Melbourne



Local links

Provide improved connections between streets and open space reserves for walking and cycling.

Example: Neill Street Linear Reserve, Carlton

THEME 5. COMMUNITY INFRASTRUCTURE

What did the 2012 structure plan outline

The structure plan noted that there are limited community and cultural facilities in Arden-Macaulay. The North Melbourne Community Centre and Jean McKendry Neighbourhood Centre are at capacity and unable to meet current demand. There is also a lack of local services co-located with these facilities to provide a high level of convenience to the community.

The plan identified facilities and services needed to support the health and well-being of the growing community. These include upgrading existing community facilities, establishing a new community centre and selecting a suitable location for a new school.

What has changed

Development contributions

An interim Development Contributions Plan Overlay (DCPO) for Macaulay will be in place until 30 June 2020. Under the DCPO, a developer is required to make a monetary contribution to help fund new and upgraded infrastructure, including community facilities. The interim contribution rates are:

- \$16,127.58 per dwelling
- \$182.58 per square metre of new commercial floor space
- \$152.15 per square metre of new retail floor space.



Image 15: Buncle Street Community Garden is one of many public housing community gardens managed by Cultivating Community. This provides opportunities for low income communities to access healthy, affordable and culturally appropriate food by enabling gardeners to keep their food culture and traditions alive.

Improvements to the interim built form controls

In September 2017 the Minister for Planning approved interim built form controls for Macaulay and identified a number of improvements which could be made including greater clarity on the most appropriate location for a school site. Appendix III provides further detail on the Minister's letter.

Arden Vision

In July 2018, the Victorian Planning Authority and the City of Melbourne released the final Arden Vision which proposes the delivery of:

- two to four new schools to meet the demand of the growing populations in the broader West and North Melbourne including new residents of Arden
- two community hubs that bring together and support local and regional residents, workers and visitors.

The vision locates one proposed community hub in Macaulay near the intersection of Boundary Road and Macaulay Road.

What is the situation today

The majority of community infrastructure is located in three facilities clustered around Melrose Street and Buncle Street in North Melbourne.

North Melbourne Community Centre

- gym with personal trainers and fitness classes
- outdoor synthetic soccer pitch and stadium
- community spaces available for use and hire including a community hall, kitchen, meeting and games room
- maternal, child and family health services

Hotham Hub Children's Centre

 child care, long day care and an integrated kindergarten program

Jean McKendry Neighbourhood Centre

- aged services and activities
- a large bookable main hall, kitchen and separate meeting rooms

Other organisations providing community services such as the Salvation Army are also located in the precinct.



How are we proposing to respond

The City of Melbourne and other agencies are planning for Macaulay's future community infrastructure needs.

Planning for an integrated hub

We are currently undertaking work to identify the location, concept design and delivery arrangements for the redevelopment of the North Melbourne Community Centre. Future consultation on the redevelopment will be undertaken with the community and a high level of amenity is provided to the future population.

The refreshed structure plan also provides an opportunity to identify the need for additional facilities in the area. Initial analysis indicates that a community hub provided on the western side of the Moonee Ponds Creek would ensure that community infrastructure is equitably provided across the Macaulay area.

School provision

The Department of Education and Training will ultimately determine where new schools will be delivered to service inner Melbourne. The Public Record Office Victoria site remains under investigation as a potential location for a future school.

Community infrastructure in Arden

Community infrastructure including new open space, sports facilities and schools will be delivered as part of the Arden Urban Renewal Precinct.

Case study: South Melbourne Primary School

South Melbourne Primary School is Victoria's first vertical state school. Opened in 2018, the six storey building is located on a half-hectare and will eventually be home to more than 525 primary school students.

The school operates as a genuine community hub with the building designed to accommodate a number of other community services and facilities at ground level, including a 44 student early learning centre. The school also houses two external outdoor play and learning areas to ensure students can continue to play and be active.

Image 16: South Melbourne Primary School

Development contributions

As the interim DCPO expires in 2020, a detailed and permanent development contributions plan is being prepared to help fund infrastructure required to meet the needs of the community. In preparing the plan, consideration will be given to the development contributions process in Arden.

Partnerships

We will continue to partner with the Victorian State Government including Victorian Planning Authority, Department of Education and Training and Department of Health and Human Services to coordinate the planning and delivery of community infrastructure.

Have your say

What community activities or support services should our indoor community facilities cater for?

THEME 6. FLOODING

What did the 2012 structure plan outline

Flooding is recognised as one of the major issues affecting Macaulay now and in the future. The plan identified the need to undertake detailed investigations of potential flooding and implications of climate change to inform the development of mitigation strategies. Further actions to reduce the impact of flooding include:

- revitalise the Moonee Ponds Creek
- enhance the role for streets and landscape through water sensitive design and flood retardation
- mitigate the impact of storm events through the extension of the creek levy banks.

What has changed

Municipal Integrated Water Management Plan

The Plan sets our strategic direction on integrated water management in response to future growth and climate change. Using a place-based and catchment approach, there is a strong focus on low-lying urban renewal areas that are subject to flooding including Macaulay.

Moonee Ponds Creek Strategic Opportunities Plan

The Moonee Ponds Creek corridor is largely controlled by Victorian Government agencies. In our role as an advocate, the plan sets out the opportunities that the City of Melbourne believes should be taken to turn the creek into an exemplar corridor for water management, public space and community activity, active transport, biodiversity, heritage and culture.

Improvements to the interim built form controls

In September 2017 the Minister for Planning approved interim built form controls for Macaulay and identified a number of improvements which could be made including potential Melbourne Water flooding requirements. Appendix III provides further detail on the Minister's letter.

What is the situation today

Flooding and water management are significant issues in Macaulay. The precinct is located in low-lying, flood prone land and is bisected by the Moonee Ponds Creek. Flood mitigation measures in the area currently include six pumping stations and levees located on both sides of the creek corridor. Flooding in the area is caused by:

- stormwater runoff being trapped behind levees along the creek corridor
- local pump stations failing to keep up with the volume of stormwater runoff
- stormwater runoff from upstream catchments flowing into the Moonee Ponds Creek
- lack of permeable surfaces to absorb water.

Pump station improvements

The City of Melbourne is planning to upgrade six pump stations in Arden and Macaulay within the next five years. This will deliver the necessary level of service required to support growth and development in the area.



Image 17: Flooding in Chelmsford Street, Kensington, during a high rainfall event.



Image 18: Flooding along Moonee Ponds Creek impacting the Capital City Trail during a high rainfall event.



Legend



Map 8: Plan showing areas affected by the Land Subject to Inundation Overlay (LSIO) and 1 in 100 year flooding.

Managing flood risk in the Melbourne Planning Scheme

The Melbourne Planning Scheme contains two overlays to manage flood risk; the Land Subject to Inundation Overlay and the Special Building Overlay. The purpose of the overlays is to protect life, assets and the environment and to minimise flood damage. They set appropriate conditions and floor levels to address any flood risk to developments. Both overlays apply to the Macaulay area and require a planning permit for buildings and works.

Land Subject to Inundation Overlay (LSIO)

The LSIO applies to land affected by flooding associated with waterways and open drainage systems.

Special Building Overlay (SBO)

The SBO identifies areas prone to overland flooding. The overlay sets appropriate conditions and floor levels to address any flood risk to developments.

Drainage contribution rates

Melbourne Water is proposing to deliver extensive measures to mitigate flooding in flood prone areas of Macaulay to allow safe development in the area. Water sensitive urban designs have been developed collaboratively with key stakeholders and embed:

- infrastructure such as levees, pipes and pumps
- blue-green streetscapes
- planning considerations such as floor levels and uses
- building controls such as rainwater tanks and flood resilient building design.

Major urban renewals in low lying areas present challenges for Melbourne Water's standard approach to regulating urban development. It is anticipated that these works will be funded by financial contributions collected by Melbourne Water. Consultation with affected land owners is planned for early 2020.



Renewing Moonee Ponds Creek

The urban renewal precincts that run along Moonee Ponds Creek corridor have the potential to become a green oasis and enhance the liveability of the City.

The Moonee Ponds Creek Strategic Opportunities Plan identified a number of key projects including the Macaulay Terraces. Located on the west side of the creek to the north of Macaulay Road, the project would deliver a range of benefits including:

- improvements to the levee wall
- stormwater cleansing
- rehabilitation of the creek corridor
- revegetation and widening of land alongside the creek
- new public space for the community.

Image 19: Macaulay Terrace on a sunny afternoon and during a major rain event. The project could provide a major new open space connecting to the Moonee Ponds Creek Trail,Macaulay Train Station, and surrounding neighbourhoods.

How are we proposing to respond

Water can be celebrated as a feature of Macaulay. This can be achieved by incorporating stormwater treatment and reuse into buildings, streets and open space.

Deliver integrated water management

Urban renewal provides opportunities to improve flood mitigation and ensure it is integrated with open spaces and the design of the public realm. Water can be embraced as part of the identify of the precinct:

- Working in partnership with Victorian Planning Authority who is responsible for preparing an Implementation Plan for the creek corridor. The plan will identify project priorities, make recommendations for governance arrangements and accountabilities and facilitate the commencement of 'quick-win' projects.
- Working in partnership with Melbourne Water and the Victorian Government to update the Land Subject to Inundation Overlay and Special Building Overlay.
- Investigating whether potential stormwater harvesting in Arden could also supply Macaulay. Treated water could be used to irrigate open space, flush toilets or fill rainwater tanks.
- Investigating a blue-green approach to water management that includes a network of cloudburst streets and green streets.
- Ensuring updated built form controls address flood risk and provide optimum outcomes for building design and its interface with the public realm.
- Requiring stormwater management through the Melbourne Planning Scheme.

Have your say

More extreme rainfall events are predicted as a result of our changing climate. Drains currently take stormwater underground, however as rainfall increases, we need to find additional ways to reduce flooding.

How important is it to allocate space in streets and parks to help manage flooding?

Examples of water management in streets

Cloudburst Street

A cloudburst is an extreme amount of precipitation in a short period of time. Cloudburst streets are used to channel and direct the large amounts of water that can be dumped during a cloudburst. By using a v-shaped profile and raised kerbs, water will flow to the middle of the street and away from buildings - contrary to standard engineering practice. Channels and swales can be established along road edges so that water runs in urban rivers or green strips.

Cloudburst streets will serve an important role in Macaulay, channelling stormwater towards open spaces that also play a role in water detention

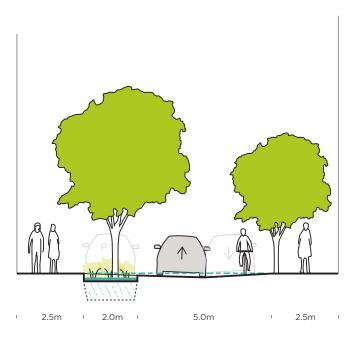


Figure 11: Proposed cloudburst street cross section



Green streets would provide upstream connections to all cloudburst streets. They should be established with a combination of small-scale channels and stormwater planters. Stormwater is collected, delayed and then channelled towards the cloudburst streets once they have capacity to channel additional water.

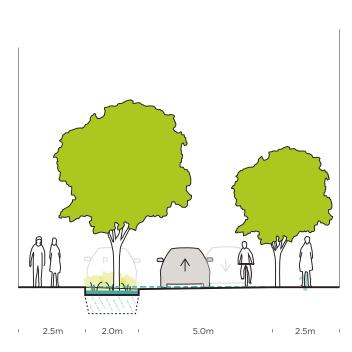


Figure 13: Proposed green street cross section

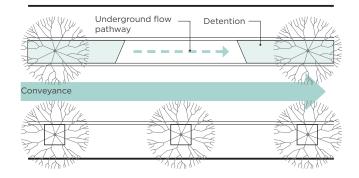


Figure 12: Plan of proposed cloudburst street showing conveyance and detention of water during a high rainfall event.

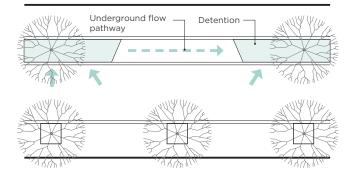
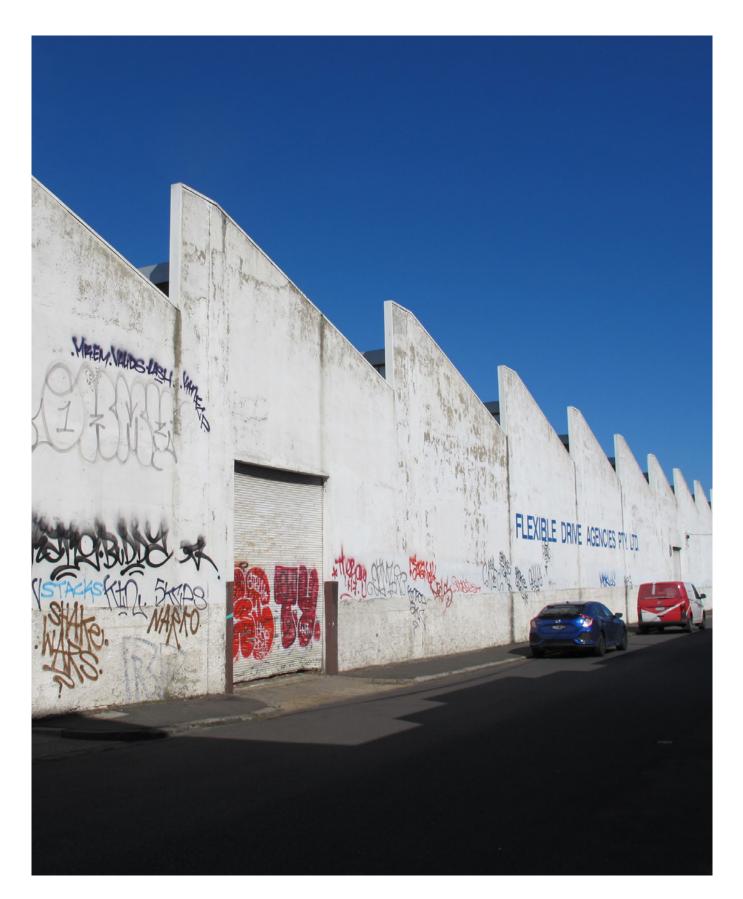


Figure 14: Plan of proposed green street showing conveyance and detention of water during a high rainfall event

NEXT STEPS

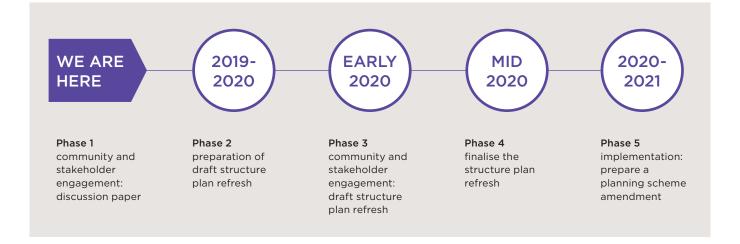


We look forward to receiving your feedback on the ideas proposed in this discussion paper.

Feedback on the discussion paper will be used to inform the development of a refreshed structure plan and identify any further work required. A Community Engagement Summary will be published before the end of 2019.

In early 2020, we will release a draft of the refreshed structure plan. There will be an opportunity for the community and other stakeholders to engage on the draft plan.

A final Macaulay Structure Plan Refresh will be presented for Council adoption in mid 2019. We will then start implementing the plan, including the preparation of a Planning Scheme Amendment to implement new built form controls.



APPENDIX I – WHAT IS HAPPENING AROUND MACAULAY

The Macaulay Urban Renewal Precinct is one of several large projects occurring in the North Melbourne and Kensington area. The Macaulay Structure Plan Refresh will need to consider and work with these other projects to ensure a cohesive urban environment in the future.

Metro Tunnel

Metro Tunnel will enhance network capacity by taking three of Melbourne's busiest train lines through a new tunnel under the city. This will free up space in the City Loop to run more trains on other lines. North Melbourne Station in Arden Central is one of five new underground stations. Metro Tunnel is due to open in 2025.

West Gate Tunnel

The Victorian Government has partnered with Transurban to deliver the West Gate Tunnel. The project which will give Melbourne a second freeway link between the west and the city, providing an alternative to the West Gate Bridge. West Gate Tunnel is due to open in 2022.

West Gate Tunnel Mitigation Impacts

The Victorian Government and Council each committed \$50 million for streetscape improvements in North and West Melbourne to mitigate the potential impacts of the West Gate Tunnel. The project study area includes Arden and Macaulay

Land Subject to Inundation and Special Building Overlay Review

Flood risk in the Melbourne Planning Scheme is managed through two overlays - the Land Subject to Inundation Overlay and the Special Building Overlay. The purpose of these overlays is to protect life, assets and the environment and to minimise flood damage.

The City of Melbourne is working in partnership with Melbourne Water and the Victorian Government to progress a whole of municipality Planning Scheme Amendment to update the overlays.

Arden Structure Plan

The final Arden Vision was released in July 2018. The Victorian Planning Authority and the City of Melbourne are leading the preparation of the Arden Structure Plan in partnership with other government departments and agencies. The aim is to have a Planning Scheme Amendment approved by the Minister for Planning by the end of 2020.

Melbourne Innovation Districts

Melbourne Innovation Districts (MID) is a partnership between the City of Melbourne, RMIT University, and the University of Melbourne, to develop urban innovations in Melbourne, for the benefit of the whole city. The MID is an opportunity to shape Melbourne's future through open collaborations that deepen the city's capacity for applied innovation.

West Melbourne Structure Plan

West Melbourne is a long-established area with a strong community, diverse mix of housing, warehouses and businesses, and a rich cultural and architectural heritage. The City of Melbourne has developed a new structure plan that takes a place-based approach to guide the development of future growth in West Melbourne.

E-Gate and Dynon

E-Gate and Dynon are identified as major urban renewal precincts in Plan Melbourne 2017-2050, the Victorian Government's long-term metropolitan planning strategy. Major urban renewal precincts will play an important role in accommodating future housing and employment growth and making better use of existing infrastructure.

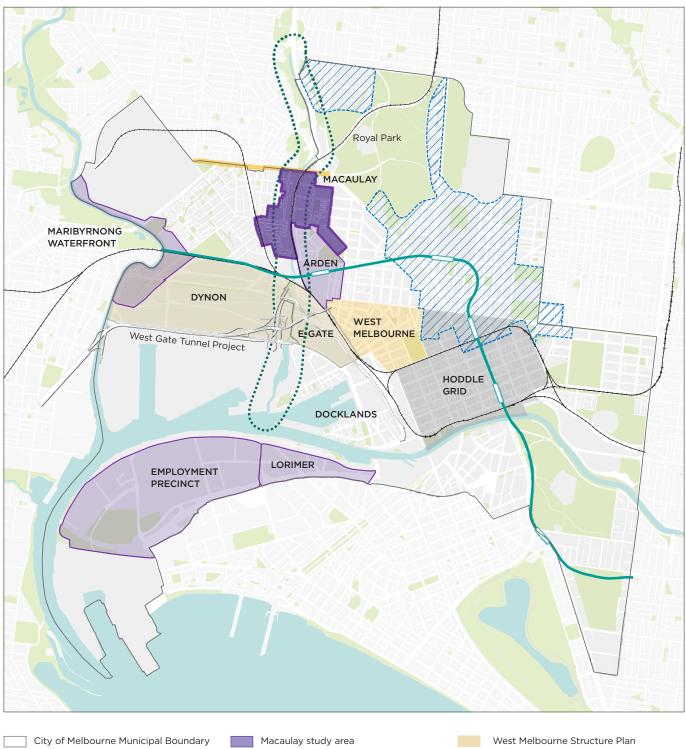
Moonee Ponds Creek Strategic Opportunities Plan

The City of Melbourne has developed a draft Strategic Opportunities Plan to revitalise Moonee Ponds Creek. The plan outlines a vision to connect communities along the creek corridor through a series of parklands, open spaces and wetlands.

The City of Melbourne is working in partnership with the Victorian Planning Authority (VPA). The VPA is responsible for preparing an Implementation Plan for the creek corridor which will identify project priorities, make recommendations for governance arrangements and accountabilities and facilitate the commencement of 'quick win' projects.

Racecourse Road Strategic Improvements Plan

Council has committed since 2016 to the creation of a Racecourse Road Strategic Improvements Plan, to improve the amenity and safety of Racecourse Road. As the northern boundary to Macaulay, the plan for Racecourse Road aims to improve the experience of the public realm.



Macaulay study area Moonee Ponds Strategic Opportunities Existing public open space Urban renewal areas (Maribyrnong Waterfront, Arden, Fishermans Bend) Plan Dynon & E-Gate Hoddle Grid and surrounds Existing train lines Melbourne Innovation District Metro Tunnel line and future stations

Waterways

Racecourse Road Strategic Improvements Plan

APPENDIX II – VISION FROM THE ARDEN-MACAULAY STRUCTURE PLAN 2012

1. Activities and land use

Arden-Macaulay will transition into a dense, mixed use inner city suburb while protecting key industrial sites. Intensified commercial activity at Arden Central linked to the Melbourne Metro will bring significant job growth and extend Melbourne's Central City to the north-west.

2. Urban Structure and built form

The built environment has a positive influence on people's living, working and travel patterns, on local economies, and on opportunities to be active. It should contribute to safety, diversity, vitality, social connections and 'sense of place'.

3. Transport and access

Workers and students will access Arden Central by the new Arden Metro station which will provide a high speed Central City connection. Improvements to existing rail stations and services and a new bus route will provide Arden-Macaulay with excellent public transport services.

4. Public realm

Leafy streets connect people to each other, to new open spaces and to the enhanced Moonee Ponds Creek parkland where they can walk and cycle to the Docklands waterfront and the Yarra River.

5. Community infrastructure

The community of Arden-Macaulay will be a sustainable one that offers a good quality of life to all generations. The new neighbourhood will be accessible, inclusive, aesthetically pleasing and safe, fostering a strong social and civic fabric and a strong local identity and sense of place.

6. Sustainable infrastructure

Arden-Macaulay will be an eco-city district with integrated and efficient private and district energy, water and waste systems that will also proof the area against the predicted drought, heatwave and extreme weather events.

APPENDIX III – MINISTER'S LETTER

On 26 September 2017, the Minister for Planning approved Part 1 of Planning Scheme Amendment C190 with changes. This included placing a two-year expiry date until 30 September 2019 over the amendment area and amended built form requirements.

The following extract from the Minister's letter approving the amendment identified a number of improvements which could be made to the built form provisions:

- provision of affordable housing, in line with the policy within the Arden-Macaulay Structure Plan 2012 and the State Government's Homes for Victorians
- housing and employment growth necessary to support the government's significant investment in public transport infrastructure and opportunities achieved through site consolidation and master planning
- better management of density through development of a Floor Area Ratio control, and potential to maximise development outcomes in exchange for public benefit through a Floor Area Uplift and public benefits schedule
- greater clarity on how preferred heights may be exceeded and maximum heights achieved
- better integration with the Victoria Planning Authority's Arden Structure Planning work
- better expression of side, rear and upper level setbacks and the effect of development on the public realm
- greater guidance for the City Link, railway line and Moonee Ponds Creek interface
- viability of development necessary to fund development contribution infrastructure requirements
- potential Melbourne Water flooding requirements
- greater clarity on the most appropriate location for a school site
- improved structure to meet requirements of the Ministerial Direction on the Form and Content of Planning Schemes.

How to contact us

Online:

melbourne.vic.gov.au

In person:

Melbourne Town Hall - Administration Building 120 Swanston Street, Melbourne Business hours, Monday to Friday (Public holidays excluded)

Telephone:

03 9658 9658 Business hours, Monday to Friday (Public holidays excluded)

Fax:

03 9654 4854

In writing:

City of Melbourne GPO Box 1603 Melbourne VIC 3001 Australia



Interpreter services We cater for people of all backgrounds

Please call 03 9280 0726

03 9280 0717 廣東話 03 9280 0719 Bahasa Indonesia 03 9280 0720 Italiano 03 9280 0721 普通话 03 9280 0722 Soomaali 03 9280 0723 Español 03 9280 0725 Việt Ngữ عربي 03 9280 0726 03 9280 0726 한국어 03 9280 0726 हिंदी 03 9280 0726 All other languages

National Relay Service:

If you are deaf, hearing impaired or speech-impaired, call us via the National Relay Service: Teletypewriter (TTY) users phone 1300 555 727 then ask for 03 9658 9658 9am to 5pm, Monday to Friday (Public holidays excluded)

